

Institution: University of Nottingham

Unit of Assessment: Sub-Panel 19: Business and Management

a. Overview

The Business School comprises five academic divisions: Management; Economics and Finance; Marketing; Operations Management and Information Systems; Accounting. Each of the divisions has, as a core responsibility, the design and delivery of teaching and learning programmes but each also forms a natural discipline-orientated research community, with its own divisional research director. The School also hosts a number of research institutes and centres, as well as some less formal research groups, with cross-divisional membership. Currently, institutes and centres within the School are:

- UNIEI – The Haydn Green Institute for Innovation and Entrepreneurship, formerly the University of Nottingham Institute for Enterprise and Innovation
- International Centre for Corporate Social Responsibility (ICCSR)
- Centre for Risk, Banking and Financial Services (CRBFS)
- Centre for Health Innovation, Leadership and Learning (CHILL)
- International Centre for Behavioural Business Research (ICBBR)
- Centre for Concurrent Enterprise (CCE)

b. Research strategy

The main elements of the Business School's declared research strategy in RAE 2008 were:

- the consolidation and continued development of established areas of strength by targeted investment.
- the exploration of potential for new and more coherently configured areas of research by adopting an alert and responsive approach to the identification of opportunities.
- the exploitation of the Business School's distinctive international profile by strengthening research links with the Chinese and Malaysian campuses.
- the continued development and refinement of the research culture and portfolio of research support within the School and the recognition and embedding of research excellence as a core principle in recruitment, performance review and promotion policy.

Significant progress has been achieved in each of these areas, as is detailed below.

Consolidating and Developing Existing Areas of Strength

As reflected in our comprehensive REF submission, with 90 eligible staff included (80%), the School continues to develop its research strengths in all areas of coverage.

The period since 2008 has been characterised by further strengthening and development of the School's distinctive competences in Entrepreneurship and Innovation, and Corporate Social Responsibility. In Entrepreneurship and Innovation, the appointment of two new chairs (Mosey, Marlow) with a further chair pending, has refreshed the leadership of this area. UNIEI has been the vehicle for a number of cross-disciplinary research collaborations. An important element in these has been the deployment of its pioneering 'Ingenuity' process, an approach to radical innovation thinking which has demonstrated its applicability and value across a wide range of organisational and disciplinary contexts. Interdisciplinary collaborations include the use of 'Ingenuity' to inform and refine research design and process in the Horizon project in the School of Computer Science and with the Collaborative Leadership in Applied Health Research and Care (CLAHRC). A current investment of c £250,000 to produce Ingenuity On Line (IOL) will generate a wealth of data on radical innovation thought processes as these are recorded systematically and on a global basis. In early 2013, a £1.5 million donation to support the School's work in this area led to the re-naming of the institute as UNIEI – the Haydn Green Institute for Innovation and Entrepreneurship. Strength

in entrepreneurship and innovation extends beyond the Institute, however, and there is also an active forum for innovation scholars based around a cross-divisional research group, which has its own programme of workshops. ESRC funding to support a seminar series in this area has recently been secured by Dr Pelin Demirel.

The area of corporate social responsibility continues to develop, focusing on the ICCSR under the leadership of Professor Jeremy Moon. A conscious shift in the emphasis of the centre's work is underway, to embrace the fertile research agenda in the area of sustainability, and in particular a 'sustainability through innovation' theme. An important element in this has been the recruitment of a new Chair in Sustainability, Professor Daniel Nyberg, in February 2013. ICCSR maintains a high international profile and is recognised for the excellence of its research in the Aspen Institute's 'Beyond Grey Pinstripes' ranking, which identified Nottingham as in the top five European centres for research in the field in 2012. The central importance of corporate social responsibility to the Business School is exemplified by its commitment to the United Nations Principles of Responsible Management Education (PRME) initiative. Research in both UNIEI and ICCSR is funded from various sources, including sizable recent grants for UNIEI from EPSRC (£269,000, joint with Computer Science) and for ICCSR from the EU FP7 (£208,000).

New Areas of Research Strength

There have been a number of significant developments since 2008. These include a much more coherent and visible presence in the area of health management research via the establishment of the Centre for Health Innovation, Leadership and Learning (CHILL). Under the leadership of Professor Justin Waring, CHILL combines existing strengths with links with the University's Medical School, School of Nursing, Institute of Mental Health, the National Institute for Health Research (NIHR), CLAHRC and with external healthcare providers at local, regional and national levels. A central theme in the work of CHILL is to develop research capacity and leadership in healthcare improvement. In 2013, Waring has secured funding in excess of £650,000 from the Health Foundation to support his three year fellowship and a number of funded PhDs.

Another initiative has been a more coherent research agenda and grouping in the areas of banking and financial services, bank governance and regulation, and risk, capitalising on existing strengths in each of these areas. This has involved merging the former Financial Services Research Forum and Centre for Risk and Insurance Studies to form CRBFS under the leadership of Professor James Devlin, with the support of over £30,000 from the Higher Education Innovation Fund and investment in new posts in the areas of finance, banking and risk. A related development is the launch of a new Masters programme in Banking and Finance.

A third development recognises the increasing prominence of, and our increasing expertise in, the behavioural science area, with the appointment of Professor Thorsten Chmura and imminent reconfiguration of ICBBR as the new Nottingham Centre for the Behavioural Sciences (NCBS), with planned investment in excess of £100000 in a new behavioural science laboratory facility on Jubilee Campus. The NCBS has an explicitly interdisciplinary mission which seeks to embrace wider disciplines such as psychology, sociology and biological sciences in collaborative research.

Exploitation of International Profile

In terms of the School's aspiration to capitalise on its operations at its overseas campuses, the Haydn Green Institute, ICCSR and ICBBR have been active in developing their respective research agendas at the international campuses and this has resulted in a number of cross-campus research collaborations and conferences held at the international campuses, the most recent of which was the ICCSR conference on 'New CSR Dynamics' in August 2013. In addition, there has been a material change in the composition of faculty at the international campuses, with the appointment of a significant number of research active scholars since 2008. This provides a platform for enhanced inter-campus research collaboration, of which there are now a number of examples, as well as the accelerated development of a genuine research culture and capability at the campuses.

Research Culture and Support

Our guiding principles in fostering a vibrant and sustainable research culture and a stimulating and supportive research environment are **inclusivity** and **comprehensiveness**. Inclusivity means encouraging and recognising the value in the diversity of research contributions by staff of all grades and levels of experience. This approach is reflected in the high proportion of eligible staff who will be returned in the current exercise. Comprehensiveness centres on a creative and broad approach to enabling researchers to develop and exploit their potential via a range of support measures and resources. These principles are purposefully and strategically applied and are central to the School's efforts in recruiting and retaining excellent staff and building a sustainable platform of research excellence. We benchmark our provision against other leading schools and encourage staff to articulate their research support needs as and when they arise.

One of the areas of support which has received increased emphasis since 2008 involves sharpening awareness of and expertise in currently under-represented research funding opportunities (e.g. EU funding) by sharing experience across the School and by further developing our more strategic approach to the generation of cross-disciplinary research bids with other schools in the University supported by Research and Graduate Services. Recent cross-disciplinary successes include collaborations with Computer Science (Binks, Kuk (EPSRC)) and Pharmacy and the Medical School (Waring (NHS and NIHR)). Another area for increased emphasis, in response to the emergent impact agenda, is identification of research themes which are demonstrably informed by and relevant to contemporary issues in practice and policymaking communities by offering financial support (via, for example, the £20,000 per annum Impact Fund) to the wider and more imaginative dissemination of research beyond academia. The Research Bid Peer Review Panel has an explicit responsibility for encouraging anticipation, planning and realisation of research impact.

We monitor the School's research performance in a number of ways, including via the University's Personal Development and Performance Review system, detailed below in Section c. We maintain a comprehensive database of all research activity, including funding bids and successes, published outputs, conference attendances and contributions, 'esteem' indicators, publicity for research and evidence of impact. We manage and monitor the School's performance in those rankings and league tables which contain a research-related component and we continually benchmark our research performance against national and international peers.

Research strategy, policy, management, profile and performance permeate discussion at all levels. The main forum for the discussion and formulation of aspects of research strategy is Research Directorate, membership of which comprises: The Dean, the Director of Research (chair), the five Divisional Research Directors, The Director of Administration, The PhD Programme Director, The Research Manager.

Aim, Objectives and Planned Activities 2013 - 2018

The aim of the Business School, in relation to its research activity, profile and reputation, is:

To sustain Nottingham University Business School's position in the premier group of UK Business Schools for research and as a recognised international centre for research excellence.

The development and delivery of the School's research strategy is the responsibility of Research Directorate, with the strategy being endorsed by the School Executive. Research Directorate also monitors progress in relation to the achievement of objectives. In terms of specific objectives over the medium term, and planned activities to support them, the School will focus on:

1. Recognising, promoting and continuing to invest in those research areas for which the School has earned an international reputation, whilst remaining alert and responsive to emergent research themes and agendas. This will involve bidding for further investment in staff and facilities from the University's Strategic Development Fund, both to add depth to existing areas and build capacity in emerging fields.
2. Growing talent and developing capacity across the range of business and management

Environment template (REF5)

disciplines by refining and increasing our scholarship provision and portfolio of staff development support.

3. Offering a dynamic, stimulating and supportive environment for research, where academic staff and research students can maximise their individual and collective research potential, irrespective of their stage of career or grade.
4. Supporting the growth of recently-established areas of research focus, most notably CHILL, CRBFS and ICBBR/NCBS, with administrative and financial assistance, and developing specialist infrastructure, with tailored investment, such as the new behavioural science laboratory.
5. Actively promoting the importance of interdisciplinarity and sharing good practice in the development and delivery of cross-disciplinary research.
6. Increasing the diversity of research funding sources by gathering and sharing intelligence on new research funding sources and initiatives, with emphasis on EU funding and funding from the business community.
7. Generating and disseminating research which is academically excellent, and which is informed by and relevant to communities beyond the purely academic. Ensuring that researchers are fully informed of the evolving impact agenda and supported in responding to its requirements.
8. Developing further the research links between staff in the Business School in the UK and their colleagues in China and Malaysia, by committing School resource to support inter-campus collaboration and research-focused visits. Supporting colleagues in China and Malaysia in developing their research infrastructures.
9. Continuing to emphasise the principles of inclusivity and comprehensiveness which underpin the School's strong research culture and consciously embedding those principles in all aspects of research and career support, such as induction, mentoring, personal development and performance review and promotion policy.

c. People, including:

i. Staffing strategy and staff development

Our staffing and staff development strategies focus on:

- excellence in recruitment, capacity building, career development and talent management
- extended induction which emphasises the strong shared culture and values of the School, with research excellence as central.
- a comprehensive and responsive research support system

The Business School's approach to recruitment is to develop or attract strong and international fields of candidates for each post. The importance of identifying and encouraging internal candidates alongside external applicants reflects the School's commitment to continuous career development and its appreciation of the challenging nature of many of its external labour markets. Research track record and potential, as evidenced by research training, publications, awards of research funding, experience of research supervision, research programme and team leadership, and wider research engagement are key factors, with the relative importance of these varying with the level of post. Clearly, the majority of posts carry a requirement for teaching and administrative duties alongside research, so that these areas of competence also need to be satisfied in the recruitment process.

An important element in recruitment and induction is making potential candidates aware of the School's philosophy towards research, which centres on hiring strong candidates and offering a comprehensive package of research support. This includes research mentoring, generous financial support for conference attendance, funded study leave, individually-targeted research funding intelligence, expert support for research bid development, annual pump-priming funding, research skills development programmes, and developmental seminar programmes. The overwhelming majority of Category A staff are on permanent contracts. The demographic profile of Staff as of July 31 2013, and of recruitment since 2008, in terms of age, gender and level of post, is given below.

	Eligible staff in post as at 31.7.13					Eligible staff who have joined the Business School on or after 1.1.08 (and still remain in post)				
	Gender		Age Range			Gender		Age Range		
	Male	Female	≤ 35	36-50	≥ 51	Male	Female	≤ 35	36-50	≥ 51
Grade										
Lecturer	30	20	20	24	6	18	14	18	13	1
Associate Professor/Reader	15	10	3	16	6	4	3	1	4	2
Professor	24	8	0	13	19	6	4	0	5	5
Total	69	38	23	53	31	28	21	19	22	8
Total Staff	107		107			49		49		

Recruitment since 2008 shows significant trends towards greater gender balance and a reduction in mean age of faculty, during an active period for recruitment, which has been most intense in the two to three years prior to the deadline for REF 2014 submission. Whilst there have at times been difficulties attracting strong fields in certain discipline areas (e.g. accounting, operations management), the general picture is of strong and invariably international shortlists and an ability to replace those who leave with equivalently or better-qualified recruits.

Supportive and effective staff development is an important component in retaining staff and the School offers an active programme of staff development events (sixteen in 2012/13), which cover a range of research-focused areas including the development of particular research skills, targeting and writing for journals, dealing with referees and editors, crafting research proposals, developing international collaborations and supervision of research students. There are further sessions to acquaint staff with the Research Excellence Framework and offering guidance on developing a research career. These sessions, many of which are demand-led, are delivered via a blend of senior internal and external leaders/facilitators. The School's study leave programme, entitles staff to apply for a period of one semester's relief from teaching and administrative responsibilities every seventh semester. The application process is rigorous, recognising that study leave represents a significant investment of the School's resource in building individual and collective research capital. End of leave reports are a requirement of the scheme. Study leave affords the opportunity for staff to visit and collaborate with individuals at other institutions, both in the UK and internationally and financial support is available to facilitate this. Equally, as noted above, financial support is provided to fund inward visits from Visiting Scholars. The School has received around seventy such visitors since the beginning of 2008.

All staff participate in the University's Personal Development and Performance Review system, which includes annual target setting in relation to research activity such as planned outputs, grant bids, impact and collaborative ventures and subsequent reflection on performance and identification of development needs. The University's promotion process invites submissions annually and the School works closely with individuals in counselling them on the timing and basis for promotion applications.

Underpinning these and other support measures is the conviction that the ability to retain excellent staff is critically important to a stable and sustainable environment which naturally enhances the School's ability to deliver excellent research and to reap the benefits which flow from it, in terms of wider impact.

We are alert to the need for succession planning, both in terms of ensuring that key research leadership roles are covered at both School and divisional levels. There is currently only one case of a joint appointment within the unit, with the Business School accounting for the majority 'share'. Overall, staffing policy is closely aligned to the School's general strategy, with excellence in recruitment and a comprehensively supportive environment for staff at all levels delivering excellence in both research, and teaching and learning. Staff are encouraged, and supported, to bid for externally-funded research fellowships and Professor Waring currently holds a three year fellowship, funded by the Health Foundation.

The School has a relatively small number of category C staff. They are fully integrated into the

culture and life of the school, rather than being identified as a separate group. This approach is reflected in the University's holding of the EU 'HR Excellence in Research' award, which embodies the *Concordat to Support the Career Development of Researchers*. The University's Research Staff Group, established in 2007 and reporting to Research Board, reflects this commitment.

The quality of research in the School is sustained by the range of measures which support research, but equally by the strongly-embedded and frequently articulated commitment to research excellence which has become a cornerstone of the School's identity, culture and shared values. The School does not discriminate between grade or level of staff in terms of the research support offered. All staff benefit from equal access to the full range of benefits. Our constant drive to encourage and support research activity across the School is founded on our commitment to inclusivity in research excellence.

Research integrity is a key element within the School's research culture. In relation to the design and conduct of research, research integrity is assured by the School's Ethics Committee, which raises awareness of and seeks assurances relating to ethical aspects of all research conducted in the School or with which School staff are associated.

ii. Research students

A large and active community of postgraduate research students is seen as central to a vibrant and sustainable research-led Business School.

We recruit around 25 new PhD students a year from approximately 500 applicants. The majority are from the UK or European Union and almost all have secured a competitive scholarship, including Business School scholarships (on average, 5 per year), Research Centre scholarships (ICCSR, CLAHRC), faculty level or university level scholarships (e.g. ESRC Doctoral Training Centre scholarships, European Union Vice Chancellor's Research Excellence Scholarship, Faculty studentships). In addition, we also appoint exceptional candidates via our Graduate Teaching Assistant (GTA) scheme (3-5 per year).

Our PhD students are provided with a rigorous, compulsory and stimulating training programme, delivered directly by the School. The core modules are taught by experienced researchers who ensure that students get access to the diversity of disciplinary perspectives. Students also benefit from being part of the vibrant and multidisciplinary research environment offered by the University's ESRC Doctoral Training Centre, which offers a wide range of advanced courses in research skills as well as opportunities for cross-institutional collaboration through the Midlands Graduate School, providing links with the Universities of Birmingham and Warwick. Further advanced modules are offered by the Graduate School and the Methods and Data Institute, with the former also offering additional study and social facilities on Jubilee Campus, adjacent to the Business School. The School organises further specialist training where needs are identified jointly with the PhD Society. Recent examples include courses in the use of NVivo and Lisrel, which were attended by both PhD students and supervisors. Each student has two supervisors and formal, documented supervision meetings take place at least ten times a year. Further staff members act as assessors in the PhD annual review process. All students are provided with desk and computer in dedicated rooms and all receive funding to attend at least one conference. Over the last 3 years, this has resulted in around 25 joint conference publications with their supervisors. Four carefully selected PhD students and one faculty member were also sponsored by the School to attend the U21 Graduate conference in Hertfordshire, U.S.A. In April 2012, a number of students presented their work and participated in the Midlands Regional Doctoral Colloquium at Birmingham Business School, alongside PhD students from Loughborough, Birmingham, Aston and Warwick. Nottingham will host this event in Spring, 2014.

The Business School has a very active PhD Society, which provides an important social network and offers a collective voice to the PhD community within the School. The society, jointly with the two deputy programme directors, has developed the PhD seminar series. Its purpose is to provide students with insights into management research that go beyond their own specialized areas, as well as offering them the opportunity to present their own work prior to a conference, in a constructive and supportive environment. The seminar series also includes presentations by

academic staff as well as high profile guest speakers. In addition, the students attend the seminar series of their relevant division within the Business School.

The size and quality of our PhD programme ensures close professional relationships between academic staff and PhD students. In addition to the supervision process, students are central to the School's research culture and activity, as evidenced by the number of publications which have been jointly authored by PhD students. We also provide PhD students with training in teaching and aim to offer teaching opportunities to those who are capable and interested in taking tutorials, lab sessions and other forms of small group teaching. We see it as an important part of the PhD experience that students have the chance to develop further the full skill set required to secure academic employment. The importance of the PhD programme in building capacity in business and management disciplines, as a resource both for the Business School and for the wider community, cannot be over-emphasised. Indeed, thirty of the School's current academic staff have Nottingham PhDs.

d. Income, infrastructure and facilities

Research awards totalling £11.64 million in the period 01.01.08 to 31.07.13 reflect a range of funding sources, including research councils (£3.93 million), UK government (£3.96 million), EU (£1.46 million), industry and commerce (£1.36 million) and the charitable sector (£0.78 million). The aggregate figure represents an increase of over 54% on the (longer) period covered by RAE 2008. Recent substantial awards (2013) include Waring (Health Foundation, £395000), MacCarthy (EPSRC, £258000) and Tannock and MacCarthy (Technology Strategy Board, £198000). There has been some unevenness in annual figures across the period, with a significant dip in 2011 and 2012, but figures to July 2013 indicate a strong recovery, with a part year total of £1.55 million. There have also been changes in relative contributions over the period, most notably a relative decline in research council contribution and a significant increase in charitable funding. In this context, the School is increasing its efforts to raise awareness of the need to diversify its funding (with particular emphasis on the EU, the charitable sector and industry and commerce) and to develop further its interdisciplinary portfolio. These new areas of emphasis, which are supported by RGS and BEIS, are reported in greater detail below.

Funding strategies

In a challenging research funding environment, we have been conscious of the need to improve the quality of research bids, to offer Seedcorn funding for smaller research projects, to develop greater awareness of the need for cross-disciplinary collaboration and to diversify our range of funding sources more generally. The School's activity in each of these areas is detailed below.

Bid Quality

In terms of bid improvement, we appointed to a new position of Research Manager in 2009. The Research Manager is responsible for continuous monitoring of the funding landscape in relation to business and management research, developing relationships with individual funding bodies, providing tailored intelligence to academics regarding funding opportunities and working with academics on aspects of bid development such as impact plans and lay statements. All financial aspects of research bids are prepared by the research support team. All bids which are submitted from the School are required to involve senior academic scrutiny and input during their development and each bid appears before a Peer Review Panel before submission. This panel, which convenes monthly, offers advice on bid improvement prior to submission. This is an important development in the context of funding bodies' more assertive approaches to demand management. In addition, all research council bids are subject to additional scrutiny at the Faculty level.

Seedcorn Funding: the 'Spark Fund'

A further initiative, which has operated on an informal basis for a number of years within the School, is an annual internal call for funding bids to support small research projects or to act as pump-priming with a view to subsequent larger external bids and the building of research capacity. This is in response to the reduced availability of small grants in the external environment. Now formalised as the 'Spark Fund' this has made awards in excess of £100,000 in the 2013 round,

Environment template (REF5)

with 22 projects and 33 members of staff receiving funding. Previous funding under this scheme has generated significant successes in terms of publications. An important feature of this initiative is its training function. Applications to the fund are required to follow the type of strict application protocol associated with the larger external funding agencies in order to be eligible for an award. An end-of-award report is also a requirement.

Funding for Impact

The increasing importance of developing research which has demonstrable impact on, and relevance to, communities and activity beyond the immediate academic context requires School-level support and encouragement. This involves raising awareness of pathways to and strategies for achieving impact, cultivating and communicating with the range of relevant potential user groups and offering financial support to underpin impact-enhancing activities. An annual 'Impact Fund' of £20,000 supports staff in the identification, development and realisation of impact opportunities.

Cross-Disciplinary Collaboration and Diversified Funding

One of the clearest emergent characteristics of the present funding environment is the increasing prominence of cross-disciplinary research. The Business School has already been involved in a number of collaborative bids with schools across the university e.g. CLAHRC, Chemistry, Biomedical Science, Computing Science, Medicine, as well as with public, private and third sector organisations. Raising awareness of the School's research capabilities across the wider university, with the support of Research and Graduate Services, is a priority as part of its resolve to develop a more active and strategic approach to the development of consortia funding opportunities. Whilst the above naturally brings new possibilities in terms of funding sources, the School also intends to increase significantly its European funding by capitalising on existing success and experience in this area and by engaging proactively with the EU Horizon 2020 Framework.

Infrastructure***Physical infrastructure***

The Business School is located on the University's Jubilee Campus, opened in 1999, which has developed into a flagship location, featuring bold architectural design, landscaped green spaces and lakes. The majority of the School's staff are located in the Business School's North and South buildings (opened in 1999 and 2004 respectively), whilst the Operations Management and Information Systems division is housed in the Yang Fujia Building, adjacent to the South Building. All locations are equipped with state-of-the-art ICT facilities. The Business School library occupies the top floor of the South Building and offers a comprehensive on-line access to research materials as well as a substantial collection of books, journals and other materials in hard copy. The School subscribes to a wide range of databases relevant to business and management research and has site licences for a similarly broad set of software tools. A welcome development since 2012 has been the integration of the PhD student community into the School's core space with dedicated new facilities. The School is in the process of establishing a large new behavioural sciences laboratory to support the development of the Nottingham Centre for the Behavioural Sciences and the research of academic staff within both the School and the wider University community.

Administrative Support

The School has an extensive community of administrative staff, supporting programmes, academic staff and functional areas such as Finance, External and Alumni Relations, Careers and Employability, Student Support, Executive Education and Research. The development of a cadre of professional administrators has been a priority for the School over the last decade, recognising the efficiencies this brings in terms of the quality of administration and the liberation of academic staff to focus on core research and teaching

ICT/IS Provision

Staff PCs are replaced every four years, or on receipt of an approved business case, or in the event of machine failure. The standard is currently a Windows 7 desktop (Intel Core i3-3220 3.3GHz, 4GB RAM, 120GB Solid State Drive, 20" TFT LED monitor). Each member of staff has a personal webspace/ftp area, can request access to networked storage of up to 1TB by default, and

Environment template (REF5)

has available a shared network space of up to 150Gb. Staff can request custom built websites and databases, which can be built in-house according to their specification and timescales. The School has in-house IT Support, which offers on site assistance with technical issues/queries, advice on the equipment relating to research needs, and support in purchasing non-standard equipment when supported by a valid business case.

The School subscribes to an extensive range of databases and software licences in supporting the research of its faculty. Individuals' specific data/software needs are identified at the point of recruitment and the range of provision is continuously reviewed and enhanced.

Research Support

This section details the range of research support measures available to academic staff within the School. It complements aspects of support described in section c of this document.

University-level Support

The University of Nottingham's forward-looking research strategy provides the institutional context for the School's approach to supporting and promoting excellent research. The University's commitment to providing an outstanding research infrastructure and environment through substantial and continuing investment is overseen by the University Research Committee. There is strong institutional promotion of curiosity-driven and interdisciplinary research. Research and Graduate Services (RGS) provides support to schools in identifying external funding opportunities, administering internal research funds including schemes targeted at early career researchers and cross-campus collaboration, advising on the establishment and management of research programmes and overseeing the work of the Graduate School, the Centre for Advanced Studies and the doctoral training centres. The Nottingham Research Leaders Programme represents a significant investment in the development and sharing of good practice in research leadership across the institution. These research support activities accounted for just under £3 million of expenditure by RGS across the University in 2012/13. Business Engagement and Innovation Services plays an important role in highlighting the University's research capabilities to the business community and in brokering collaborative research relationships between business and academics. Further research-related training is offered by the University's Continual Professional Development provision.

School-level Support

In addition to the various forms of institutional support, the School deploys a range of local support measures, which reflect the particular structures of the School, the needs of researchers operating in the business and management arena and the differing needs of staff at different career stages.

Induction, Mentoring and the role of Divisional Research Directors

All staff new to the School participate in an induction programme to acquaint them with the structures, processes and general life of the School. This includes one-to-one meetings with the Dean, the Director of Research, the Research Manager and Research Administrator. A mentor is assigned to all new junior staff. This role embraces guidance on research development. Divisional research directors offer further support via their facilitation and encouragement of research at the divisional level and their involvement in the development of research bids.

Financial Support

The School offers various sources of financial support for academic staff. All staff have a personal research account, which is credited with £500 on joining the School. This can be augmented by funding associated with postgraduate dissertation supervision, internal examination of PhD students etc. Where staff members are successful in securing external research funding, they receive a financial reward in their research account. The personal research account may be used for any legitimate research-related expenditure, including data purchase, specialist software and research-related travel. In addition, all staff benefit from an annual conference allowance of £2000 to attend international conferences where they are presenting a paper. The Research Directorate Special Fund makes awards on a discretionary basis for a variety of research-related activities. These include funding (especially early career) staff to attend major conferences where they are

Environment template (REF5)

not presenting a paper, and research-related skills development events. The Visiting Scholar Support Fund provides travel and accommodation funding for those spending time at another institution whilst on study leave, and support for international scholars visiting the School. The annual 'Spark' Fund is described in Section c, above. In 2012/13, School expenditure against these budgets totalled just under £200,000.

Administrative Support

The Research Manager has a key role in gathering and sharing intelligence on research funding sources and matching funding opportunities to research skills within the school. This role is also heavily involved in the development of research bids, ensuring compliance with funder requirements, providing a lay insight into bid quality, offering advice on ethical issues and guidance on impact and dissemination strategies. The Research Administrator has responsibility for administering and costing research bids and managing the range of financial support measures relating to research, including conference funding, journal submission funding and study leave support.

Seminar Programmes

There is a range of seminar programmes within the school, with regular divisional and centre/institute-based series running concurrently, alongside periodic School-wide seminars from eminent international figures. In addition to the more formal staff seminar model, there are informal sessions centred on staff work-in-progress or associated with cross-divisional groups of staff who share a common interest e.g. in the area of innovation. The School has joint responsibility for the ESRC-funded Network of Industrial Economists, where activities included hosting seminars and PhD colloquia. Staff in the School have recently been involved in successful bids for ESRC funding for the following seminar programmes:

- Lessons in the Management of 'People Risk': a multidisciplinary approach (Bryce – lead applicant)
- Innovating for a low carbon economy (Demirel – lead applicant)
- Financial Services and Consumers: issues and challenges in a context of change (Devlin)
- Corporate Social Responsibility among small and medium sized enterprises from emerging and developing economies (Muthuri)
- Marketplace exclusion: representations, resistances and responses (Cluley)

The School is, therefore, represented in five of the ten newly-supported seminar programmes in business and management in 2013.

Further Research Support

There is a range of further forms of research support within the School. This includes the funding of divisional 'awaydays' which provide the opportunity for divisional colleagues to discuss and plan research collaboration, research paper development events which offer a constructive environment in which researchers can share their ideas for academic papers and benefit from insights from colleagues in terms of paper structure and target journals, and administrative, event planning and financial support for workshops, conferences and symposia hosted by the School. As part of their induction programme, all staff are actively encouraged to signal to the Research Director any needs in relation to maximisation of their research potential.

e. Collaboration or contribution to the discipline or research base***Collaborative Research***

There is a strong tradition of collaborative research within the School. Collaboration takes a number of forms. Individual academics naturally work with colleagues both within the School and at other institutions, nationally and internationally. Some examples of recent and current research collaboration between Nottingham staff and colleagues at eminent international institutions (grouped on a regional basis) include:

Europe: Chmura's experimental work with Engel (Max Planck Institution for Public Goods, Bonn) and Stauf (University of Cologne), Starkey and Tempest's collaboration with Hatchuel (Ecole des

Environment template (REF5)

Mines, Paris) in the areas of management theory and practice and management as design, Moon's work on corporate social responsibility with Rasche and Knudsen (Copenhagen Business School) and Bakker (University of Amsterdam) and Korczynski's collaboration with Larsson and Ivarsson (University of Karlstad) on the sociology of service work.

North America: Edinger's work with a number of colleagues at the University of Maryland and Rutgers University, Chmura's work with Goerg (Florida State University), Goldfinch's collaboration with De Rouen (University of Alabama) on public management, Moon's work with Freeman (Darden School, University of Virginia) on gender and responsible business and with Crane and Matten (Schulich School of Business, York University).

Asia, Australia, South America: Chmura's work with Kusakawa (University of Osaka) and Xiangdong and Shin (Shanghai Jiao Tong University), Devlin's work with Worthington (Monash University), Goldfinch's work on public management with Yakamoto (University of Tokyo), Wastell's collaboration with Munoz (Catholic University of Chile, Santiago) and De (IIM Bangalore) on adoption and diffusion of information technology.

Collaborative research funding is also common, with a range of joint and network-based grants funding research projects, particularly in the areas of operations management, where there is a strong track-record of EU funding (e.g. 'Gala' FP7 project with Universities of Genoa, Utrecht, Graz, Madrid and others - Nottingham share £197000, and healthcare, via CHILL and the CLAHRC (with various health agencies, including NHS, NIHR). The Visiting Scholar scheme affords the opportunity to strengthen international collaboration via both incoming visitors and School staff spending periods at other institutions. There is also a variety of institutional partnership arrangements of differing levels of formality, many of which include a research component.

Contribution to the Discipline, Research Base

The contribution of the School's staff to the wider academic community and beyond, at regional, national and international levels, is actively encouraged as something which enriches the individual and School experience and reputation. There are many media for reflecting this wider contribution and engagement. These include leadership and membership positions in learned societies and other national and international organisations, editorial positions with academic journals, involvement in conference, workshop and seminar organisation and delivery, engagement with communities of practice, government and regulatory bodies, work with the research councils and consultancy and advisory roles with other universities in relation to research policy and performance. These and other types of contribution are financially supported by the School and are recognised as valued contributions in the University's Personal Development and Performance Review system.

The cataloguing of these types of contributions by individual staff runs to several hundred entries over the period 2008 – 2013. In this section, we concentrate on citing examples of staff involvement in journal editorial processes, which we regard as a key indicator of service to the wider academic community.

Many staff are involved in the editing of major journals, as editors, associate editors, editorial board members or special issue editors. These include Professor Binks (Technology Analysis and Strategic Management), Professor Bruce (Journal of Gambling, Business and Economics), Professor Devlin (Journal of Financial Services Marketing), Professor Fenn (European Journal of Law and Economics), Dr Hoffmann (Homo Oeconomicus), Professor MacCarthy (International Journal of Production Economics – European Editor, International Journal of Operations and Production Management, Journal of Manufacturing Technology Management), Dr McCabe (Annals of Tourism Research), Professor Marlow (International Small Business Journal – Editor), Professor Mosey (Journal of Technology Transfer) Professor Paton (Special Issue Editor for both *Economica* and *Southern Economic Journal*), Professor Patriotta (Journal of Management Studies, Organization Studies), Professor Pawar (International Journal of Logistics: Research and Applications – Editor), Professor Perks (Journal of Product Innovation Management – Associate Editor), Dr Peters (Journal of Business Research); Professor Smith (Journal of Marketing

Environment template (REF5)

Management, Journal of Consumer Behaviour) Professor Starkey (Organization Studies, Long Range Planning), Professor Tynan (Journal of Marketing Management), Professor Waring (Sociology – Associate Editor, Sociology of Health and Illness), Professor Wastell (European Journal of Information systems – Associate Editor, Information Management), Professor Watson (Journal of Management Studies, Human Relations), Dr Windrum (Structural Change and Economic Dynamics) and Professor Winklhofer (International Marketing Review). An audit of this area of work in early 2013 identified over 160 editorial positions held by School staff.

The School takes an active role in hosting conferences for national and international audiences of scholars and practitioners and in the management, organisation and delivery of international conferences, via membership of scientific and organising committees, track chairs, keynote presentations etc. There are around 140 examples of conference leadership roles catalogued over the assessment period.

Equally, staff members are encouraged to play active and leading roles in learned societies and professional associations. For example, Professor MacCarthy has recently served a term as President of the European Decision Sciences Institute (2011/12), Professor Marlow is Alternate President of the Institute for Small Business and Entrepreneurship, Professor Starkey is a BAM Fellow, a member of the EFMD R&D Committee and the ESRC Evaluation Committee, Professor Tynan has held leadership roles in the Chartered Institute of Marketing and the Academy of Marketing and Professor Bruce is on the Research Steering Committee of the ABS. In particular relation to the development of the research base in the business and management area, Professor Tynan serves on the REF Business and Management sub-panel, having also served under the previous RAE. Professors Starkey and Bruce have chaired or delivered sessions on a number of occasions at EFMD and BAM/ABS research directors' development programmes and Professors Bruce and Waring are also members of the EURAM/EFMD Association of Research Directors.

Staff are also actively encouraged to contribute to the welfare of the wider academic community by serving as external examiners at other institutions and as members of advisory, accreditation and validation panels. There are numerous catalogued examples of this type of activity between 2008 and 2013. In this and the other categories of wider academic service described here, the volume, level and diversity of contributions reflect that detailed in relation to journal editorial roles.

Institutional membership of, and active involvement in, international networks is extremely important to the School. The School has EQUIS and AMBA accreditation with the EFMD and is currently pursuing AACSB accreditation. It is also an Academic Council Member of EIASM and a member of ABIS (formerly EABIS). The School ensures the fullest level of participation by its staff in the events of each of these networks.